CLAIMS

1. A ball endmill including a cylindrical tool body which is to be rotated about an axis thereof as a rotary axis, and ball-nosed end cutting edges which are provided in a distal end portion of the tool body and which describe a semi-spherical-shaped locus while the tool body is being rotated, the ball endmill being characterized in that:

each of the ball-nosed end cutting edges has a first portion formed to extend from the axis as a starting end thereof, and a second portion formed to extend from a terminal end of the first portion as a starting end thereof;

the first portion is shaped to be arcuate which is convex in a direction of rotation of the tool body and which has a first radius of curvature as seen in a distal end view in a direction of the axis, the first radius of curvature being in a range of from 0.025D to 0.10D relative to an outside diameter D; and

the second portion is shaped to be arcuate which is convex in the direction of rotation of the tool body and which has a second radius of curvature as seen in the distal end view in the direction of the axis, the second radius of curvature being larger than the second radius of curvature.

2. The ball endmill according to claim 1, characterized in that the first portion has an inscribed angle that is in a range of from 60° to 120° as seen in the distal end view in the direction of the axis.